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## LETTERS TO THE EDITOR.

**\*\* Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.**

**On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.**

**The editor will be glad to publish any queries consonant with the character of the journal.**

## The Color Question.

A FEW weeks ago (*Science*, March 25) Mr. Milton Bradley wrote to you on this subject, which unfortunately is still in an unsatisfactory state, notwithstanding the researches of Helmholtz and Maxwell. Mr. Bradley is, do doubt, quite right in treating, for the purposes of his system, all the colors of the spectrum as of equal value, but it is by no means as clear as he supposes that the three colors, red, green, and violet, are entitled to be considered primaries in preference to red, yellow, and blue, if any colors are to be thus treated. The fact that Maxwell found the cross-section of a cone of color to be approximately triangular with red, green, and violet at the three corners, proves little as to the real relation between the various colors. It is very easy by means of a prism so to condense a spectrum as that only red, green, and violet shall be visible, and my impression is that some such explanation will be found of Maxwell's supposed elementary green at least. I read with suspicion such statements as that most natural yellows and blues when analyzed by a prism show a large quantity of green

in their composition, and that yellow can be produced by mingling green and violet. In the former case the green is due probably to an overlapping of the yellow and the blue, notwithstanding the belief, which is erroneous, that the yellow and blue of the prism will not produce green. Anyone on looking through a prism at different objects can easily devise a mode of causing two spectra to overlap, and thus convince himself that the blue and yellow do actually thereby give rise to green. He can, moreover, make the red and violet rays overlap, and thus form shades of purple. Such being the case, green, although sometimes in overlapping spectra observed by looking through the prism it appears to obliterate the blue, is no more entitled to be called a primary color than purple itself. For all practical purposes all the colors should be regarded as primary, the question of their actual relation being left to be settled by further investigation.

C. STANILAND WAKE.

349 North Clark Street, Chicago, Ill.

## Family Types.

CAN I ask one or two questions about Mr. Williams's note in the issue of April 15? Does the mother in placental mammals tend to assimilate in respect to blood to the father? Does the result of a study for twenty-five years of one family offer more than the slightest evidence on the point in question? Does the mother frequently acquire diseases belonging to the father indirectly through the child she is carrying? Does each child in a family

## CALENDAR OF SOCIETIES.]

## Women's Anthropological Society of America, Washington.

April 30.—Miss Annie T. Smith, Report of the Committee on the Investigation of Directive Forces in Society; Mrs. York, Medical Inspection of Schools; Miss Sickles, The Ghost Dance.

## Biological Society, Washington.

April 30.—The principal paper of the evening was: The Distribution of Land, Water, and Ice on this Continent in Later Geological Periods, by Professor W. J. McGee; Communications: Erwin F. Smith, The Relation of Plants to the Soil; Charles Hallock, Where Salt-Water Fishes Hide; Results of Deep-Water Seining.

## Society of Natural History, Boston.

May 4.—J. S. Kingsley, Notes on the Anatomy of Amphiuma.

## Publications Received at Editor's Office.

- BAUSCH, EDWARD. Manipulation of the Microscope. Rochester, Bausch and Lomb Optical Co. 16°. 128 p. Ill.
- CATHCART GEORGE R. Literary Reader; A Manual of English Literature. New York, American Book Co. 12°. 560 p. \$1.15.
- CHAPMAN, C. H. An Elementary Course in Theory of Equations. New York, John Wiley & Sons. 12°. 98 p. \$1.50.
- CHURCH, IRVING P. Notes and Examples in Mechanics. New York, John Wiley & Sons. 8°. 144 p., plates. \$2.
- GORMAN, S. The Discoboli. Cambridge, Museum Comp. Zool. 4°, paper. 96 p., plates.
- GREELY, A. W. Irrigation and Water Storage in the Arid Regions. Report to the Sec. of War. Washington, Government. 4°, paper. 356 p. Maps.
- HURST, G. H. Silk Dyeing, Printing and Finishing. With numerous colored patterns. New York, Macmillan & Co. 16°. 184 p. \$2.
- LANDAUER, J. Blowpipe Analysis. Trans. by James Taylor. 2d ed. New York, Macmillan & Co. 16°. 190 p. \$1.10.
- MORRIS, R. ANNA. Physical Education in the Public Schools. New York, American Book Co. 8°. 192 p. \$1.

## Business Department.

The Providence and Stonington Steamship Company's new steel steamer New Hampshire made a record for phenomenal speed on her trial trip at Wilmington, Del., on April 21, 1892. Loaded with 600 tons dead weight, she made time over the measured mile, two minutes fifty-nine seconds, an average of over twenty miles per hour. The New Hampshire is a sister ship to the Maine, recently built at Wilmington, for the Providence and Stonington Steamship Company, which has also proven a great success, both as a fast sailer and a most comfortable and luxurious boat for passengers.

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For exchange.—A fine thirteen-keyed flute in leather covered case, for a photograph camera suitable for making lantern slides. Flute cost \$27, and is nearly new. U. O. COX, Mankato, Minn.

To exchange; Experiment Station bulletins and reports for bulletins and reports not in my file. I will send list of what I have for exchange. P. H. ROLFS, Lake City, Florida.

Finished specimens of all colors of Vermont marble for fine artistic purposes. Will be given only for valuable specimens because of the cost of polishing. GEO. W. PERRY, State Geologist, Rutland, Vt.

For exchange.—Three copies of "American State Papers Bearing on Sunday Legislation," 1891, \$2.50, new and unused, for "The Sabbath," by Harmon Kingsbury, 1840; "The Sabbath," by A. A. Phelps, 1842; "History of the Institution of the Sabbath Day, Its Uses and Abuses," by W. L. Fisher, 1859; "Humorous Phases of the Law," by Irving Browne; or other works amounting to value of books exchanged, on the question of governmental legislation in reference to religion, personal liberty, etc. If preferred, I will sell "American State Papers," and buy other books on the subject. WILLIAM ADDISON BLAKELY, Chicago, Ill.

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## Wants.

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J. C. DANA.

Denver, Col., April 27.

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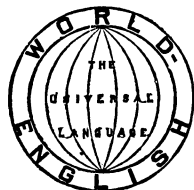
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—A. C. McClurg & Co. announce a volume entitled "Direct Legislation by the People," by Nathan Cree. The author gives a brief review of direct government from the earliest times, and of the rise and development of popular representation. He then considers the advantages of combining direct popular legislation with representative institutions, in which direction, he believes, lies emancipation from political corruption. In this connection he examines two remarkable features of the Swiss Government, viz., the *Referendum* and the *Popular Initiative*. The author's standpoint is said to be conservative.

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